<u>IN THE CLAIMS:</u>

Please cancel Claims 6, 10, and 14, without prejudice or disclaimer of subject matter, and amend Claims 1-4, 7-9, 11-13, 15, and 17-19 as indicated below. The following is a complete listing of claims and replaces all prior versions and listings of claims in the present application.

Claim 1 (currently amended): An image processing apparatus comprising:

storage means for storing a plurality of electronic data as target comparison images;

input means for inputting a reference comparison image obtained from a printed material;

<u>segmentation means for segmenting the reference comparison image into a plurality of regions based on an attribute;</u>

grayscale feature amount extraction means for extracting a grayscale feature amount ~~of the reference comparison image~~ <u>from a region having a predetermined attribute among the plurality of regions segmented by said segmentation means;</u>

retrieval means for retrieving a target comparison image corresponding to the reference comparison image from said storage means by using the grayscale feature amount extracted by said grayscale feature amount extraction means; and

processing means for extracting the image retrieved by said retrieval means from said storage means and processing the extracted image.

Claim 2 (currently amended): The apparatus according to claim 1, wherein the grayscale feature amount ~~comprises of one or an arbitrary combination of a plurality of types of~~ includes at least one of: a brightness feature amount, [[or]] a texture feature amount, [[or]] and a shape feature amount of the reference comparison image.

Claim 3 (currently amended): The apparatus according to claim 1, wherein said retrieval means compares a grayscale feature amount extracted from the region having the predetermined attribute of the reference comparison image and a grayscale feature amount of the target comparison image, and outputs a similar target comparison image as a retrieval result.

Claim 4 (currently amended): The apparatus according to claim 1, further comprising:

color feature amount extraction means for extracting a color feature amount of ~~a color of~~ the region having the predetermined attribute of the reference comparison image; and

determination means for determining whether the color information extracted by said color feature amount extraction means is sufficient,

wherein said retrieval means retrieves the target comparison image corresponding to the reference comparison image from said storage means based on the ~~basis of the grayscale feature amount of the reference comparison image and the color feature amount of the reference comparison image~~ color feature amount of a region whose

color information is determined by said determination means to be sufficient and the grayscale feature amount of a region whose color information is determined by said determination means not to be sufficient.

Claim 5 (original): The apparatus according to claim 4, wherein the color feature amount includes at least one of a mode color and an average color in the reference comparison image.

Claim 6 (canceled).

Claim 7 (currently amended): The apparatus according to claim 1, further comprising:

display means for displaying a retrieval result [[by]] of said retrieval means; and

selection means for, when said display means displays a plurality of target comparison images as the retrieval results by result of said retrieval means, selecting a desired image from the plurality of target comparison images,

wherein said processing means extracts the image selected by said selection means from said storage means, and executes a process for the extracted image.

Claim 8 (currently amended): The apparatus according to claim 1, further comprising:

designation means for designating a ~~type of~~ <u>user-desired</u> process for the image retrieved by said retrieval means,

wherein said processing means extracts the retrieved image and executes the ~~designated process on the basis of the type of~~ process designated by said designation means.

Claim 9 (currently amended): The apparatus according to claim 8, wherein said designation means ~~can designate~~ <u>designates</u> at least one ~~process from~~ <u>of:</u> a printing process<u>,</u> <u>a</u> distribution <u>process,</u> <u>a</u> storage <u>process,</u> and <u>an</u> editing <u>process</u>.

Claim 10 (canceled).

Claim 11 (currently amended): The apparatus according to claim ~~4, further comprising segmentation means for segmenting the reference comparison image into a plurality of regions on the basis of an attribute, wherein said grayscale feature amount extraction means extracts the grayscale feature amount from a region having a first attribute among the plurality of regions segmented by said segmentation means, and said color feature amount extraction means extracts the color feature amount from a region having a second attribute among the plurality of regions segmented by said segmentation means~~ <u>1, wherein the predetermined attribute is an image attribute</u>.

Claim 12 (currently amended): The apparatus according to claim 1, further

comprising:

text feature amount extraction means for extracting a text feature amount of

~~a text image in~~ <u>from the segmented region having a text attribute of</u> the reference

comparison image~~; and segmentation means for segmenting the reference comparison~~

~~image into a plurality of regions on the basis of an attribute, wherein said grayscale feature~~

~~amount extraction means extracts the grayscale feature amount from a region having a first~~

~~attribute among the plurality of regions segmented by said segmentation means, said text~~

~~feature amount extraction means extracts the text feature amount from a region having a~~

~~text attribute among the plurality of regions segmented by said segmentation means,~~

~~and,~~ <u>wherein</u> said retrieval means retrieves the target comparison image corresponding to

the reference comparison image from said storage means by using the grayscale feature

amount extracted by said grayscale feature amount extraction means and the text feature

amount extracted by said text feature amount extraction means.


Claim 13 (currently amended):  The apparatus according to claim [[1]] <u>4</u>,

further comprising:

~~color feature amount extraction means for extracting a color feature amount~~

~~of a color of an image;~~

text feature amount extraction means for extracting a text feature amount

~~of a text image~~ <u>from the segmented region having a text attribute of the reference</u>

<u>comparison image;</u>

~~segmentation means for segmenting the reference comparison image into a~~

plurality of regions on the basis of an attribute; and

determination means for determining whether to retrieve a region having a predetermined attribute among the regions segmented by said segmentation means on the basis of color information;

wherein said grayscale feature amount extraction means extracts the grayscale feature amount from a region determined by said determination means not to undergo retrieval based on the color information;

said color feature amount extraction means extracts the color feature amount from a region determined by said determination means to undergo retrieval based on the color information;

said text feature amount extraction means extracts the text feature amount from a region having a text attribute among the regions segmented by said segmentation means, and

said retrieval means retrieves the target comparison image corresponding to the reference comparison image from said storage means on the basis of the extracted grayscale feature amount, the extracted color feature amount, and the extracted text feature amount

wherein said retrieval means retrieves the target comparison image corresponding to the reference comparison image from said storage means based on the color feature amount of a region whose color information is determined by said determination means to be sufficient, the grayscale feature amount of a region whose color information is determined by said determination means not to be sufficient, and the text

feature amount extracted by said text feature extraction means.

Claim 14 (canceled).

Claim 15 (currently amended):  The apparatus according to claim 1, further comprising registration means for extracting a feature amount from a registration image and registering the feature amount of the registration image as the feature amount of reference comparison the target image in said storage means.

Claim 16 (original):  The apparatus according to claim 15, wherein the feature amount extracted by said registration means includes the grayscale feature amount.

Claim 17 (currently amended):  The apparatus according to claim 15, further comprising:

segmentation means for segmenting the registration image into a plurality of regions based on the basis of an attribute,

wherein said registration means extracts and registers a feature amount corresponding to an attribute of the region segmented by said segmentation means.

Claim 18 (currently amended):  An image processing method comprising:

an input step of inputting a reference comparison image obtained from a printed material;

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a segmentation step of segmenting the reference comparison image into a plurality of regions based on an attribute;

a grayscale feature amount extraction step of extracting a grayscale feature amount ~~of the reference comparison image~~ from a region having a predetermined attribute among the plurality of regions segmented in the segmentation step;

a retrieval step of retrieving a target comparison image corresponding to the reference comparison image from a plurality of electronic data stored as target comparison images in a storage medium, by using the grayscale feature amount extracted in the grayscale feature amount extraction step; and

a process step of extracting the image retrieved in the retrieval step from the storage medium and processing the extracted image.

Claim 19 (currently amended): A computer- readable storage medium storing a computer program for implementing an image processing method, the computer program comprising:

a program code for an input step of inputting a reference comparison image obtained from a printed material;

a program code for a segmentation step of segmenting the reference comparison image into a plurality of regions based on an attribute;

a program code for a grayscale feature amount extraction step of extracting a grayscale feature amount ~~of the reference comparison image~~ from a region having a predetermined attribute among the plurality of regions segmented in the segmentation step;

a program code for a retrieval step of retrieving a target comparison image corresponding to the reference comparison image from a plurality of electronic data stored as target comparison images in a storage medium, by using the grayscale feature amount extracted in the grayscale feature amount extraction step; and

a program code for a process step of extracting the image retrieved in the retrieval step from the storage medium and processing the extracted image.